

# User Manual / Warranty HOLE FINDER





The HOLE FNDER is a measuring instrument, for quarry use, to find the holes for the diamond wire cutting.

# Symbols for these operating instructions for use

The important information for your safety.

Always observe these instructions, to avoid accidents and damage:



**NOTICE!** Prevent risks of your health and indicates possible risks of injury.



**CAUTION**: It indicates possible danger to the 'device or other objects'.



**NOTE**: Highlights tips and information.

# Security measures

- Entrust the use of HOLE FINDER personally trained in the use;
- Remove the HOLE FINDER from the packaging and for safety, keep the packaging (plastic, wood, polystyrene, etc.,) out of the reach of children;



- Verify that the power cord of the battery charger is intact and verify that the various components
  of the instrument (suitcase and cables) have not been damaged during transport. DO NOT operate
  the unit if the cable 'damaged;
- Do not open / unscrew for any reason the panel into the suitcase;
- Before starting the HOLE FINDER, read the operating instructions carefully and keep them together
  with the warranty certificate, the proof of purchase (Invoice) and, if possible, the packaging; for any
  questions contact the support.
- Use the HOLE FINDER exclusively for the intended purpose;



• If the instrument get direct water, unplug it from the power supply, turn it off and let it dry in a dry airy environment; stagnant water and moisture can damage seriously the instrument;



- Not groped to repair HOLE FINDER, but contact an authorized technician. In order to avoid the
  occurrence of dangerous situations, it is recommended to contact the manufacturer, or our Technical
  Support;
- To prevent overheating, do not cover the HOLE FINDER when is running or in charging;
- During insertion and extraction of the probes in and out of the holes, do not yank the cables, to avoid possible breaks;



- During insertion and extraction of the probes in and out of the holes, the cables must be kept in traction, so that they are not twisted or tangled inside the holes, as it may damage them severely;
- If the cables are damaged, they must be replaced by the manufacturer, or his agent, or service staff with similar qualifications, in order to prevent any risk;



- When not in use, the instrument must be switched off and kept on charge;
- The working temperature must be between -10 and +40 ° C;
- Carefully follow the instructions provided with this instruction booklet.

#### **Battery Charge**

- Before connecting the battery charger to the mains, make sure that the voltage charge corresponds to that prescribed by this, and that the supply line is sized for the required load;
- The HOLE FINDER is compliance with the Directive 2006/95 / EC on Low Voltage and 2004/108 / EC on electromagnetic compatibility;



- To preserve battery life, after the use the instrument should be kept switched off and charging; if it is not turned off, the charging circuit is not working.;
- Batteries should never be fully discharged, in which case you may damage the meter beyond repair. Do not forget the instrument on!
- When the battery charger is properly connected and data is being charged, the LED of the charger will turn on. Fully charged, the LED will turn off automatically, but a holding voltage will be maintained, needed to keep the batteries full, ready to use, preserving the life.



• The instrument should be kept constantly charged or loaded every 15-20 days, otherwise the batteries will lose charge and efficiency.

# **Instrument components**

The HOLE FINDER instrument is complete of:

- Electronic machinery containing the electronic circuit, with display showing the distance and left/right position;
- One electronic battery charger 220 Volt and 50 Hz;
- Coiler with 50mt cable with receiving probe, 35 mm. diameter;
- Coiler with 100 mt cable, of wich 10mt of semi-rigid tube end, with transmitting probe 14 mm. diameter;
- Stainless steel adapter for transmitting probe, to be used for wide diameters holes, with Allen key for fixing;
- Nos. 20 aluminium coupling poles of 2 m. per piece, to introduce the probes in the no-intersecting holes.

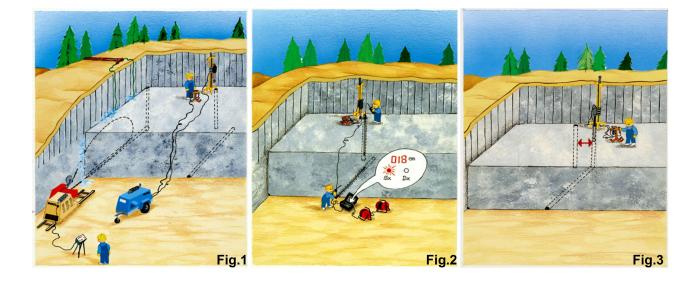
#### Use

The instrument allows to find the exact position of the non-intersecting holes (Fig.1),

Through the fitting of the probes into the non intersecting holes, the instrument shows (Fig.2):

- ✓ if the holes are long enough or are short;
- if the hole is on the left or on right as to the other;
- ✓ the minimum distance between a hole and the other.

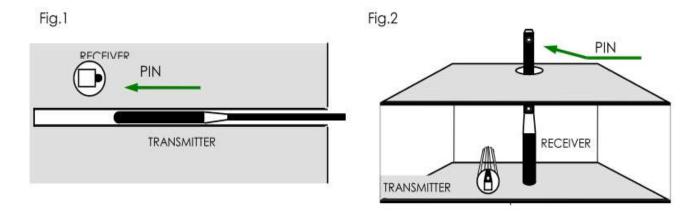
So, it is sufficient to move the drill parallel to the hole for the distance which appears on the instrument and to effect a new hole, knowing, this time, the exact position (Fig.3).



#### How to Use

#### 1st STEP: LEFT - RIGHT

WITH THE HOLE FINDER DEVICE ON, MOVE ONLY THE TRANSMITTER WHILE THE RECEIVER LIES STILL WITH THE PIN TOWARDS THE OTHER HOLE (Fig. 1 and 2).



- 1) Insert the receiver into one hole.
- 2) Keep the receiver still with the pin turned towards the entry of the other hole (see fig. 1 and 2).
- 3) Move the transmitter inserting the same into the hole.
- 4) The first lamp which remains on, shows where the hole has to be done.
- 5) Keeping still the receiver, push the transmitter into the hole until the lights L-R will flash on and off.

#### This means that:

- The hole in which has inserted the transmitter is not short, the transmitter has gone beyond the other hole.
- The indication of the "overcoming" of the other hole, the transmitter probe must exceed it of about 10-15 cm
- The point where the lamps L-R are inverted (Fig. 3) is the nearest point to the other hole (in this point it will be measured the minimum distance).

# 2<sup>nd</sup> STEP: MINIMUM DISTANCE

MOVE ONLY THE RECEIVER WHILE THE TRANSMITTER IS FIXED AT THE INVERSION POINT (Fig. 3).

INVERSION POINT OF THE LAMPS L-R

TRANSMITTER

DISTANCE

DISTANCE

FULL

O FULL

O LOW

OFF

ON

FIG.3

- 1) Keep the transmitter still in the point where the lamps are inverted (Fig. 3).
- 2) Move the receiver up and down until the lowest reading is obtained.
- 3) Repeat 1 to 3 once again.

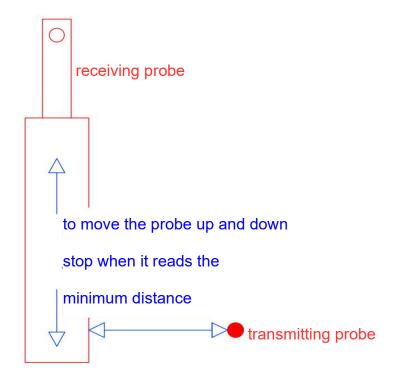
# NOTES ON READING THE DISTANCE

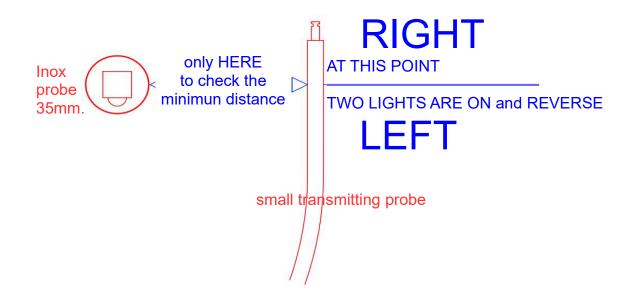


We recommend to check the correct operation of the instrument before each use; below a brief description of how to position the probes to verify that the instrument works properly:

- → The right distance (the minimum one) is obtained by measuring from edge to edge of the inserted probes and not from the holes' center; (see drawing Fig. 4)
- → The precision of the display is detected with the following parameters:
- from 120 to 60 cmt, the measurement is in 5 cmt of 5 cmt
- from 60 to 8 cmt, the measurement is 2 cmt of 2 cmt
- under 5 cmt the display shows UFL e after shows 120 cmt, in this case, the instrument works under safety and turns off.

Fig. 4





# Cleaning



The instrument must be cleaned after each use.

- To clean the suitcase inside end outside with a wet sponge water (**not dripping**) and then leave the clean parts in ventilated place, so that they are completely dry;
- It is recommended that the connector contacts are dried completely and regularly treated with antioxidant spray.
- To clean cables, cable reel and probes with a wet rag, so as to prevent the stone dust dries and forms encrustations, which could damage the cables and probes on the joints..
- Clean the aluminum extensions bars, paying attention at both ends, so that pins and springs for the interlocking of the bars, are not damaged.

# Technical details:

Maximum measurable distance: 120 cm
Receiving probe diameter: 35 mm
Transmitting small probe diameter: 14 mm
Maximum measurable distance left-right: 140 cm
Length of cable of the receiving probe: 50 mt
Length of cable of the transmitting small probe: 100 mt

■ Working temperature: from -10 to +40 c°

• Self feeding by rechargeable battery

(subject to change)

# Measuring Range:

- from 120 to 60 cmt, the measurement is in 5 cmt of 5 cmt
- from 60 to 8 cmt, the measurement is 2 cmt of 2 cmt
- under 5 cmt the display shows UFL e after shows 120 cmt, in this case, the instrument works under safety and turns off.

#### Rechargeable batteries:

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# Warranty

The HOLE FINDER is covered by warranty for 12 months from date of purchase, according to the regulated current.

The guarantee is **EX WORKS**.

If we resort to the guarantee, it is recommended to hand over HOLE FINDER complete in all its parts.

Cleaning and maintenance, and replacement of parts subject to wear and tear, wear or failure to observe the rules of use, does not fall under the guarantee and hence are to be paid.

The guarantee is canceled in case of intervention by third persons not qualified and authorized by the manufacturer.

The manufacturer is not liable for damage due to the malfunctioning of or delay in the repair of the instrument.

#### Disposal



Protect the environment! Electronic products should not be disposed of as household waste.

For the removal of equipment, make use of the collection points provided for this type and put those tools that are no longer in use.

It thus contributes to avoiding a potential effect on the environment and human health, due perhaps to a wrong deletion. This means a personal contribution to the reuse, recycling and other forms of utilization of used electronic equipment.

You can find the corresponding information on the appropriate collection points in the local administrations.